

Groundwater Discussions— Bridgeton Landfill and West Lake Landfill

Date/Time: January 20, 2016 – Start Time 10:00 A.M. to 2:00 P.M. central time

Teleconference line (866)-299-3188, passcode# 9135517883

Adobe Connect, web link to Adobe Connect:

<https://epawebconferencing.acms.com/rlnwqlamekj/>

AGENDA

1. Introductions - EPA continue discussion on new Operable Unit (OU3) for the WLL site and recap prior discussion/To Do's

- i. USGS to evaluate list of PCOCs/water quality parameters/leachate tracers
- ii. Schedule/target goals - drafting RI/FS AOC/SOW, negotiate, finalize
 - Nature and Extent (RI)/BLRA
 - CSM supported by MW network
 - F&T rolled into RI from OU1 data
 - Development of robust GW 3D infinite modeling to support CSM
 - FS that considers the wide array of GW engineered remedies, engineering/land use controls and future monitoring

2. State of Missouri - update on Bridgeton and associated groundwater (GW) monitoring network

- i. Update on Bridgeton/OU2 – Closure/Permitting Status
 1. Investigation results & remaining work
 2. Status of hydraulic control
 3. Need for and plans for implementation of Corrective Action
- ii. Action Items or Next Steps

3. Discuss GW units - alluvial unit and bedrock unit, unit interactions:

- i. Discuss primary hydraulic boundaries and anticipated or known localized flow mechanisms (need to locate, confirm and define by aquifer testing methods). Effects of leachate collection system on and potentially offsite.
- ii. Discuss “natural spring” located within the landfill unit or any other gaining/losing features to consider
- iii. Discuss placement of well screens across the identified units (or at least start this discussion)
- iv. Continue discussion on sampling methods or best practices needed to obtain representative results (low flow protocols, PDBs, use of PZ vs MWs, dedicated pumps, methods for low producing MWs, etc.)
- v. Action Items or Next Steps

4. Discuss GW data sets and prior data objectives:

- i. Understanding source(s) of radionuclides in GW:
 - RIM
 - Natural dissolution of bedrock

- Anthropomorphic dissolution of bedrock due to interaction with LF leachate
 - Mobilization of radionuclides due to interaction with LF leachate
 - Impacts of leachate combined with natural dissolution
- ii. Discuss the current condition, locations, depths, and continued usefulness of the existing MWs at the site
 - iii. Plume chasing - Alluvial and Bedrock process/methods
 - iv. Discuss existing USGS understanding of the site and for general site vicinity
 - v. Discuss previous anomalies or interesting results (i.e. PZ-101, D14, etc.)
 - vi. Discuss on-going/pending F&T testing for WLL (OU1 status update)
 - vii. Discuss other potential OU3 COCs related to GW and landfill leachate (identification by tracer/ability to fingerprint onsite vs offsite contributors)
 - viii. Discuss off-site data/known GW issues from other potential sources/contributors (Auto repair shop, former leachate lagoon, Crossroads property, former service station, etc.)
 - ix. Actions items or Next Steps

5. Recap of action items for OU3 moving forward:

- i. State and EPA data needs to support GW investigations (network)/site model
- ii. State outlines of work to be performed/schedules for Bridgeton Landfill
- iii. EPA outlines/schedules for work to be performed for OU3
- iv. Discuss ongoing or planned MDNR actions

6. Miscellaneous and next meeting